

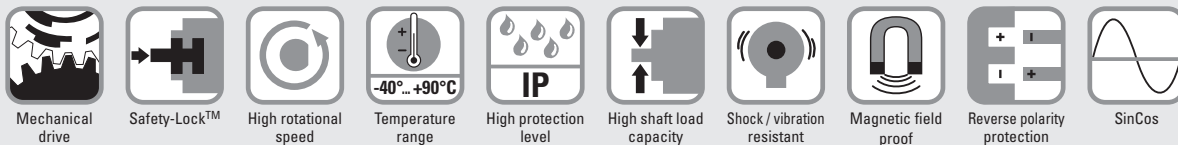
# Absolute encoders – multiturn

<b>Standard mechanical multiturn, optical</b>	<b>Sendix 5863 / 5883 (shaft / hollow shaft)</b>	<b>SSI / BiSS + incremental</b>
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The Sendix 5863 and 5883 multiturn encoders with SSI or BiSS interface and optical sensor technology can achieve a resolution of max. 29 bits.

A through hollow shaft up to 14 mm and a blind hollow shaft up to 15 mm are available, as well as versions with additional SinCos or RS422 incremental track.



## Reliable

- Tried-and-tested in applications with the highest demands, such as in wind energy or mobile automation.
- Absolutely reliable operation in areas with strong magnetic fields, thanks to mechanical gear with optical sensor technology.
- Rugged die-cast housing, remains sealed even in harsh everyday use.
- -40°C... +90°C: use in wide temperature range and protection IP67.

## Versatile

- Available with SSI or BiSS interface and combined with SinCos incremental signals.
- The right fixing solution or type of connection available for every application.
- SET button and LED for simple start-up.

## Order code Shaft version

**8.5863** . XXXX . XX2X  
Type                    a   b   c   d                    e   f                    g

If for each parameter of an encoder the underlined preferred option is selected, then the delivery time will be 10 working days for a maximum of 10 pieces.  
Qts. up to 50 pcs. of these types generally have a delivery time of 15 working days.



### a Flange

- 1 = clamping flange, IP65 ø 58 mm [2.28"]**
- 3 = clamping flange, IP67 ø 58 mm [2.28"]
- 2 = synchro flange, IP65 ø 58 mm [2.28"]**
- 4 = synchro flange, IP67 ø 58 mm [2.28"]
- 5 = square flange, IP65 □ 63.5 mm [2.5"]
- 7 = square flange, IP67 □ 63.5 mm [2.5"]
  
- 6 = servo flange, IP65 ø 63.5 mm [2.5"] <sup>1)</sup>
- 8 = servo flange, IP67 ø 63.5 mm [2.5"] <sup>1)</sup>

### b Shaft (ø x L), with flat

- 1 = 6 x 10 mm [0.24 x 0.39"]** <sup>2)</sup>
- 2 = 10 x 20 mm [0.39 x 0.79"]** <sup>3)</sup>
- 3 = 1/4" x 7/8"
- 4 = 3/8" x 7/8"

### c Interface / power supply

- 1 = SSI, BiSS / 5 V DC
- 2 = SSI, BiSS / 10 ... 30 V DC**
- 3 = SSI, BiSS + 2048 ppr. SinCos / 5 V DC
- 4 = SSI, BiSS + 2048 ppr. SinCos / 10 ... 30 V DC
- 5 = SSI, BiSS / 5 V DC, with sensor output
- 6 = SSI, BiSS + 2048 ppr. SinCos / 5 V DC, with sensor output
- 7 = SSI, BiSS + 2048 ppr. RS422 (TTL-comp.) / 5 V DC
- 8 = SSI, BiSS + 2048 ppr. RS422 (TTL-comp.) / 10 ... 30 V DC
- 9 = SSI, BiSS + 2048 ppr. RS422 (TTL-comp.) / 5 V DC, with sensor output

### d Type of connection

- 1 = axial cable, 1 m [3.28'] PVC
  - A = axial cable, special length PVC \*)
  - 2 = radial cable, 1 m [3.28'] PVC**
  - B = radial cable, special length PVC \*)
  - 3 = axial M23 connector, 12-pin
  - 4 = radial M23 connector, 12-pin**
  - 5 = axial M12 connector, 8-pin <sup>4)</sup>
  - 6 = radial M12 connector, 8-pin <sup>4)</sup>
- \*) Available special lengths (connection types A, B):  
2, 3, 5, 8, 10, 15 m [5.56, 9.84, 16.40, 26.25, 32.80, 49.21']  
order code expansion .XXXX = length in dm  
ex.: 8.5863.112A.G323.0030 (for cable length 3 m)

### e Code

- B = SSI, binary
- C = BiSS, binary
- G = SSI, gray**

### g Options (service)

- 1 = no option
- 2 = status LED
- 3 = SET button and status LED**

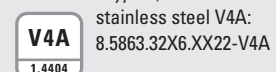
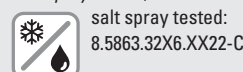
### f Resolution <sup>5)</sup>

- A = 10 bit ST + 12 bit MT
- 1 = 11 bit ST + 12 bit MT
- 2 = 12 bit ST + 12 bit MT
- 3 = 13 bit ST + 12 bit MT**
- 4 = 14 bit ST + 12 bit MT
- 7 = 17 bit ST + 12 bit MT

### Optional on request

- Ex 2/22 <sup>6)</sup>
- other singleturn resolutions
- surface protection salt spray tested
- seawater resistant (stainless steel V4A)

Salt spray tested / stainless steel V4A as standard types (deliverable as from 1 unit)



1) US version.

2) Preferred type only in conjunction with flange type 2.

3) Preferred type only in conjunction with flange type 1.

4) Only in conjunction with interface type 1 and 2.

5) Resolution, preset value and counting direction factory-programmable.

6) For the cable connection type, cable material PUR.

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<b>Order code</b>	<b>8.5883</b>	<b>.XXXX.XX2X</b>	If for each parameter of an encoder the <b>underlined preferred option</b> is selected, then the delivery time will be 10 working days for a maximum of 10 pieces.	<b>10 by 10</b>
<b>Hollow shaft</b>	Type	<div style="display: flex; justify-content: space-around; font-size: small;"> <span><b>a</b></span> <span><b>b</b></span> <span><b>c</b></span> <span><b>d</b></span> <span><b>e</b></span> <span><b>f</b></span> <span><b>g</b></span> </div>	Qts. up to 50 pcs. of these types generally have a delivery time of 15 working days.	

<p><b>a Flange</b></p> <p>1 = with spring element, long, IP65          2 = with spring element, long, IP67          3 = with stator coupling, IP65 ø 65 mm [2.56"]          4 = with stator coupling, IP67 ø 65 mm [2.56"]  <u>5 = with stator coupling, IP65 ø 63 mm [2.48"]</u>          6 = with stator coupling, IP67 ø 63 mm [2.48"]</p> <p><b>b Through hollow shaft</b></p> <p>3 = ø 10 mm [0.39"]  <u>4 = ø 12 mm [0.47"]</u>          5 = ø 14 mm [0.55"]          8 = ø 3/8"          9 = ø 1/2"</p> <p style="padding-left: 20px;"><i>Blind hollow shaft</i> (insertion depth max. 30 mm [1.18"])</p> <p>6 = ø 15 mm [0.59"]</p> <p><b>c Interface / power supply</b></p> <p>1 = SSI, BiSS / 5 V DC  <u>2 = SSI, BiSS / 10 ... 30 V DC</u>          3 = SSI, BiSS + 2048 ppr. SinCos / 5 V DC          4 = SSI, BiSS + 2048 ppr. SinCos / 10 ... 30 V DC          5 = SSI, BiSS / 5 V DC, with sensor output          6 = SSI, BiSS + 2048 ppr. SinCos / 5 V DC, with sensor output          7 = SSI, BiSS + 2048 ppr. RS422 (TTL-comp.) / 5 V DC          8 = SSI, BiSS + 2048 ppr. RS422 (TTL-comp.) / 10 ... 30 V DC          9 = SSI, BiSS + 2048 ppr. RS422 (TTL-comp.) / 5 V DC, with sensor output</p>	<p><b>d Type of connection</b></p> <p>2 = radial cable, 1 m [3.28'] PVC          B = radial cable, special length PVC *)  <u>E = tangential cable, 1 m [3.28'] PVC</u>          F = tangential cable, special length PVC *)  <u>4 = radial M23 connector, 12-pin</u>          6 = radial M12 connector, 8-pin <sup>2)</sup></p> <p>*) Available special lengths (connection types B, F):          2, 3, 5, 8, 10, 15 m [5.56, 9.84, 16.40, 26.25, 32.80, 49.21']          order code expansion .XXXX = length in dm          ex.: 8.5883.542B.G323.0030 (for cable length 3 m)</p>	<p><b>e Code</b></p> <p>B = SSI, binary          C = BiSS, binary  <u>G = SSI, gray</u></p> <p><b>f Resolution <sup>1)</sup></b></p> <p>A = 10 bit ST + 12 bit MT          1 = 11 bit ST + 12 bit MT          2 = 12 bit ST + 12 bit MT  <u>3 = 13 bit ST + 12 bit MT</u>          4 = 14 bit ST + 12 bit MT          7 = 17 bit ST + 12 bit MT</p>	<p><b>g Options (service)</b></p> <p>1 = no option          2 = status LED  <u>3 = SET button and status LED</u></p>
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<p><b>Optional on request</b></p> <ul style="list-style-type: none"> <li>- Ex 2/22 (not for type of connection E, F) <sup>3)</sup></li> <li>- other singleturn resolutions</li> <li>- surface protection salt spray tested</li> <li>- seawater resistant (stainless steel V4A)</li> </ul>	<p><b>Salt spray tested / stainless steel V4A as standard types (deliverable as from 1 unit)</b></p> <table border="0" style="width: 100%;"> <tr> <td style="text-align: center;"></td> <td style="padding-left: 10px;">salt spray tested:</td> <td style="border: 1px solid black; padding: 2px; font-size: x-small;"><b>V4A</b></td> <td style="padding-left: 10px;">stainless steel V4A:</td> </tr> <tr> <td></td> <td>8.5883.24X6.XX22-C</td> <td></td> <td>8.5883.24X6.XX22-V4A</td> </tr> <tr> <td></td> <td>8.5883.25X6.XX22-C</td> <td style="border: 1px solid black; padding: 2px; font-size: x-small;">1.4404</td> <td></td> </tr> </table>		salt spray tested:	<b>V4A</b>	stainless steel V4A:		8.5883.24X6.XX22-C		8.5883.24X6.XX22-V4A		8.5883.25X6.XX22-C	1.4404	
	salt spray tested:	<b>V4A</b>	stainless steel V4A:										
	8.5883.24X6.XX22-C		8.5883.24X6.XX22-V4A										
	8.5883.25X6.XX22-C	1.4404											

Mounting accessory for shaft encoders	Order no.
<b>Coupling</b>	
bellows coupling ø 19 mm [0.75"] for shaft 6 mm [0.24"]	<b>8.0000.1102.0606</b>
bellows coupling ø 19 mm [0.75"] for shaft 10 mm [0.39"]	<b>8.0000.1102.1010</b>
Mounting accessory for hollow shaft encoders	Order no.
<b>Cylindrical pin, long</b>	
for flange with spring element (flange type 1 + 2)	
with fixing thread	<b>8.0010.4700.0000</b>
Connection technology	Order no.
<b>Cordset, pre-assembled</b>	
M12 female connector with coupling nut, 8-pin 2 m [6.56'] PVC cable	<b>05.00.6041.8211.002M</b>
M23 female connector with coupling nut, 12-pin 2 m [6.56'] PVC cable	<b>8.0000.6901.0002.0031</b>
<b>Connector, self-assembly (straight)</b>	
M12 female connector with coupling nut, 8-pin	<b>05.CMB 8181-0</b>
M23 female connector with coupling nut, 12-pin	<b>8.0000.5012.0000</b>

Further accessories can be found in the accessories section or in the accessories area of our website at: [www.kuebler.com/accessories](http://www.kuebler.com/accessories).  
 Additional connectors can be found in the connection technology section or in the connection technology area of our website at: [www.kuebler.com/connection\\_technology](http://www.kuebler.com/connection_technology).

1) Resolution, preset value and counting direction factory-programmable.  
 2) Only in conjunction with interface type 1 and 2.  
 3) For the cable connection type, cable material PUR.

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## Technical data

Mechanical characteristics		
<b>Maximum speed shaft version</b>		
IP65 up to 70°C [158°F]	12000 min <sup>-1</sup> , 10000 min <sup>-1</sup> (continuous)	
IP65 up to T <sub>max</sub>	8000 min <sup>-1</sup> , 5000 min <sup>-1</sup> (continuous)	
IP67 up to 70°C [158°F]	11000 min <sup>-1</sup> , 9000 min <sup>-1</sup> (continuous)	
IP67 up to T <sub>max</sub>	8000 min <sup>-1</sup> , 5000 min <sup>-1</sup> (continuous)	
<b>Maximum speed hollow shaft version</b>		
IP65 up to 70°C [158°F]	9000 min <sup>-1</sup> , 6000 min <sup>-1</sup> (continuous)	
IP65 up to T <sub>max</sub>	6000 min <sup>-1</sup> , 3000 min <sup>-1</sup> (continuous)	
IP67 up to 70°C [158°F]	8000 min <sup>-1</sup> , 4000 min <sup>-1</sup> (continuous)	
IP67 up to T <sub>max</sub>	4000 min <sup>-1</sup> , 2000 min <sup>-1</sup> (continuous)	
<b>Starting torque at 20°C [68°F]</b>		
IP65	< 0.01 Nm	
IP67	< 0.05 Nm	
<b>Mass moment of inertia</b>		
shaft version	4.0 x 10 <sup>-6</sup> kgm <sup>2</sup>	
hollow shaft version	7.0 x 10 <sup>-6</sup> kgm <sup>2</sup>	
<b>Load capacity of shaft</b>		
radial	80 N	
axial	40 N	
<b>Weight</b>		
	approx. 0.45 kg [15.87 oz]	
<b>Protection acc. to EN 60529</b>		
housing side	IP67	
shaft side	IP65, opt. IP67	
<b>Working temperature range</b>		
	-40°C ... +90°C [-40°F ... +194°F] <sup>1)</sup>	
<b>Material</b>		
shaft/hollow shaft	stainless steel	
flange	aluminum	
housing	zinc die-cast	
cable	PVC (PUR for Ex 2/22)	
<b>Shock resistance acc. to EN 60068-2-27</b>		
	2500 m/s <sup>2</sup> , 6 ms	
<b>Vibration resistance acc. to EN 60068-2-6</b>		
	100 m/s <sup>2</sup> , 55 ... 2000 Hz	

Electrical characteristics		
<b>Power supply</b>		
	5 V DC (+5%) or 10 ... 30 V DC	
<b>Current consumption (no load)</b>		
5 V DC	max. 80 mA	
10 ... 30 V DC	max. 50 mA	
<b>Reverse polarity protection of the power supply</b>		
	yes (at 10 ... 30 V DC)	
<b>Short circuit proof outputs</b>		
	yes <sup>2)</sup>	
<b>UL approval</b>		
	file no. E224618	
<b>CE compliant acc. to</b>		
	EMC guideline 2014/30/EU RoHS guideline 2011/65/EU	

SSI interface		
<b>Output driver</b>		
	RS485 transceiver type	
<b>Permissible load / channel</b>		
	max. +/- 20 mA	
<b>Signal level</b>		
	HIGH typ. 3.8 V	
	LOW at I <sub>Load</sub> = 20 mA typ. 1.3 V	
<b>Resolution singleturn</b>		
	10 ... 14 bit and 17 bit	
<b>Number of revolutions (multiturn)</b>		
	4096 (12 bit)	
<b>Code</b>		
	binary or gray	
<b>SSI clock rate</b>		
	50 kHz ... 2 MHz	
<b>Data refresh rate</b>		
ST resolution ≤ 14 bit	≤ 1 μs	
ST resolution ≥ 15 bit	4 μs	
<b>Monoflop time</b>		
	≤ 15 μs	
<b>Note:</b> If the clock starts cycling within the monoflop time, a second data transfer starts with the same data. If the clock starts cycling after the monoflop time, the data transfer starts with the new values. The update rate is dependent on the clock speed, data length and monoflop-time.		

BiSS interface		
<b>Output driver</b>		
	RS485 transceiver type	
<b>Permissible load / channel</b>		
	max. +/- 20 mA	
<b>Signal level</b>		
	HIGH typ. 3.8 V	
	LOW at I <sub>Load</sub> = 20 mA typ. 1.3 V	
<b>Resolution singleturn</b>		
	10 ... 14 bit and 17 bit	
<b>Number of revolutions (multiturn)</b>		
	4096 (12 bit)	
<b>Code</b>		
	binary	
<b>Clock rate</b>		
	50 kHz ... 10 MHz	
<b>Max. update rate</b>		
	< 10 μs, depends on the clock rate and the data length	
<b>Data refresh rate</b>		
ST resolution ≤ 14 bit	≤ 1 μs	
ST resolution 17 bit	2.4 μs	
<b>Note:</b>		
	– bidirectional, factory programmable parameters are: resolution, code, direction, alarms and warnings	
	– CRC data verification	

Status output and LED		
<b>Output driver</b>		
	open collector, internal pull up resistor 22 kΩ	
<b>Permissible load</b>		
	max. 20 mA	
<b>Signal level</b>		
	HIGH +V	
	LOW < 1 V	
<b>Active</b>		
	LOW	
The optional LED (red) and the status output serve to display various alarm or error messages. In normal operation the LED is OFF and the status output is HIGH (open collector with int. pull up 22 kΩ).		
An active status output (LOW) displays:		
	– sensor error, singleturn or multiturn (soiling, glass breakage etc.)	
	– LED fault (failure or ageing)	
	– over- or under-temperature	
In the SSI mode, the fault indication can only be reset by switching off the power-supply to the device.		

Incremental outputs (A/B)		
	<b>SinCos</b>	<b>RS422 TTL compatible</b>
<b>Max. frequency -3dB</b>		
	400 kHz	400 kHz
<b>Signal level</b>		
	1 V <sub>pp</sub> (±20 %)	HIGH: min. 2.5 V LOW: max. 0.5 V
<b>Short circuit proof</b>		
	yes <sup>2)</sup>	yes <sup>2)</sup>
<b>Pulse rate</b>		
	2048 ppr	2048 ppr

1) Cable version: -30°C ... +75°C [-22°F ... +167°F].

2) Short circuit to 0V or to output, one channel at a time, power supply correctly applied.

## Absolute encoders – multiturn

Standard mechanical multiturn, optical		Sendix 5863 / 5883 (shaft / hollow shaft)	SSI / BiSS + incremental
<b>SET input or SET button</b>			
<b>Input</b>	active HIGH		
<b>Input type</b>	comparator		
<b>Signal level</b>	HIGH	min: 60 % of +V (power supply) max: +V	
	LOW	max: 25 % of +V (power supply)	
<b>Input current</b>	< 0.5 mA		
<b>Min. pulse duration (SET)</b>	10 ms		
<b>Timeout after SET signal</b>	14 ms		
<p>The encoder can be set to zero at any position by means of a HIGH signal on the SET input or by pressing the optional SET button (with a pencil, ball-point pen or similar). Other preset values can be factory-programmed. The SET input has a signal processing time of approx. 1 ms. Once the SET function has been triggered, the encoder requires an internal processing time of approx. 15 ms before the new position data can be read. During this time the status output is at LOW.</p> <p>If this input is not used, it should be connected to 0 V (Encoder ground GND) in order to avoid interferences.</p>			
<b>DIR input</b>			
<p>Direction input: A HIGH signal switches the direction of rotation from the default cw to ccw. This function can also be factory-programmed to be inverted. If DIR is changed when the device is already switched on, then this will be interpreted as an error. The LED will come ON and the status output will switch to LOW.</p> <p>If this input is not used, it should be connected to 0 V (Encoder ground GND) in order to avoid interferences.</p>			
<b>Response time (DIR input)</b>	1 ms		
<b>Power-ON</b>			
<p>After Power-ON the device requires a time of approx. 150 ms before valid data can be read.</p> <p>Hot plugging of the encoder should be avoided.</p>			

# Absolute encoders – multiturn

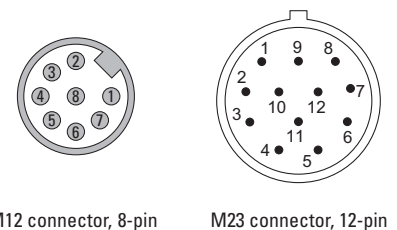
<b>Standard mechanical multiturn, optical</b>	<b>Sendix 5863 / 5883 (shaft / hollow shaft)</b>	<b>SSI / BiSS + incremental</b>
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## Terminal assignment

Interface	Type of connection	Features	Cable (isolate unused cores individually before initial start-up)
1, 2	1, 2, A, B, E, F	SET, DIR, Status	Signal: 0 V +V C+ C- D+ D- SET DIR Stat N/C N/C N/C $\perp$
			Core color: WH BN GN YE GY PK BU RD BK - - - shield
1, 2	3, 4	SET, DIR, Status	M23 connector, 12-pin
			Signal: 0 V +V C+ C- D+ D- SET DIR Stat N/C N/C N/C $\perp$ Pin: 1 2 3 4 5 6 7 8 9 10 11 12 PH
5	1, 2, A, B, E, F	SET, DIR, Status sensor output	Cable (isolate unused cores individually before initial start-up)
			Signal: 0 V +V C+ C- D+ D- SET DIR Stat N/C 0Vsens +Vsens $\perp$ Core color: WH BN GN YE GY PK BU RD BK - GY-PK RD-BU shield
5	3, 4	SET, DIR, Status sensor output	M23 connector, 12-pin
			Signal: 0 V +V C+ C- D+ D- SET DIR Stat N/C 0Vsens +Vsens $\perp$ Pin: 1 2 3 4 5 6 7 8 9 10 11 12 PH
3, 4, 7, 8	1, 2, A, B, E, F	SET, DIR, SinCos or incr. RS422	Cable (isolate unused cores individually before initial start-up)
			Signal: 0 V +V C+ C- D+ D- SET DIR A $\bar{A}$ B $\bar{B}$ $\perp$ Core color: WH BN GN YE GY PK BU RD BK VT GY-PK RD-BU shield
3, 4, 7, 8	3, 4	SET, DIR, SinCos or incr. RS422	M23 connector, 12-pin
			Signal: 0 V +V C+ C- D+ D- SET DIR A $\bar{A}$ B $\bar{B}$ $\perp$ Pin: 1 2 3 4 5 6 7 8 9 10 11 12 PH
6, 9	1, 2, A, B, E, F	SinCos o. incr. RS422 sensor output	Cable (isolate unused cores individually before initial start-up)
			Signal: 0 V +V C+ C- D+ D- A $\bar{A}$ B $\bar{B}$ 0Vsens +Vsens $\perp$ Core color: WH BN GN YE GY PK BU RD BK VT GY-PK RD-BU shield
6, 9	3, 4	SinCos o. incr. RS422 sensor output	M23 connector, 12-pin
			Signal: 0 V +V C+ C- D+ D- A $\bar{A}$ B $\bar{B}$ 0Vsens +Vsens $\perp$ Pin: 1 2 3 4 5 6 7 8 9 10 11 12 PH
1, 2	5, 6	SET, DIR	M12 connector, 8-pin
			Signal: 0 V +V C+ C- D+ D- SET DIR $\perp$ Pin: 1 2 3 4 5 6 7 8 PH

- +V: Encoder power supply +V DC
- 0 V: Encoder power supply ground GND (0 V)
- 0 Vsens / +Vsens: Using the sensor outputs of the encoder, the voltage present can be measured and if necessary increased accordingly.
- C+, C-: Clock signal
- D+, D-: Data signal
- A,  $\bar{A}$ : Incremental output channel A (cosine)
- B,  $\bar{B}$ : Incremental output channel B (sine)
- SET: SET input
- DIR: Direction input
- Stat: Status output
- PH  $\perp$ : Plug connector housing (shield)

### Top view of mating side, male contact base



M12 connector, 8-pin

M23 connector, 12-pin

# Absolute encoders – multiturn

**Standard  
mechanical multiturn, optical**

**Sendix 5863 / 5883 (shaft / hollow shaft)**

**SSI / BiSS + incremental**

## Dimensions shaft version

Dimensions in mm [inch]

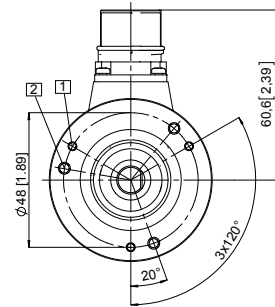
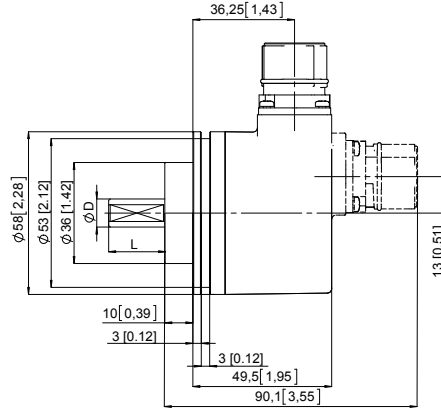
### Clamping flange, $\varnothing$ 58 [2.28]

#### Flange type 1 and 3

(drawing with M23 connector)

- 1 3 x M3, 6 [0.24] deep
- 2 3 x M4, 8 [0.32] deep

D	Fit	L
6 [0.24]	h7	10 [0.39]
10 [0.39]	f7	20 [0.79]
1/4"	h7	7/8"
3/8"	h7	7/8"



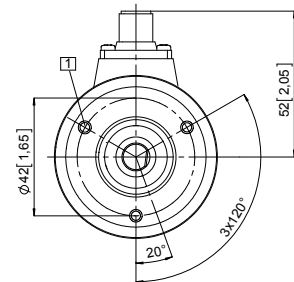
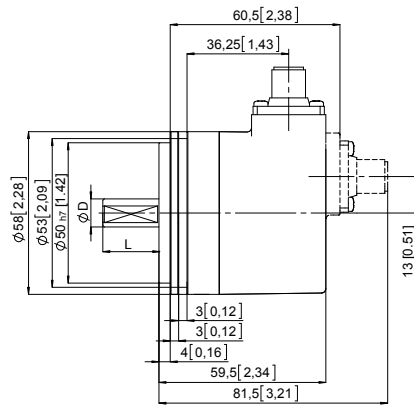
### Synchro flange, $\varnothing$ 58 [2.28]

#### Flange type 2 and 4

(drawing with M12 connector)

- 1 3 x M4, 6 [0.24] deep

D	Fit	L
6 [0.24]	h7	10 [0.39]
10 [0.39]	f7	20 [0.79]
1/4"	h7	7/8"
3/8"	h7	7/8"

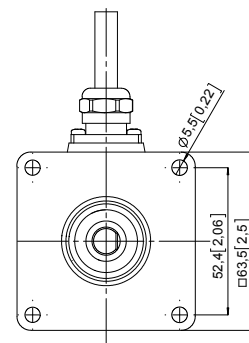
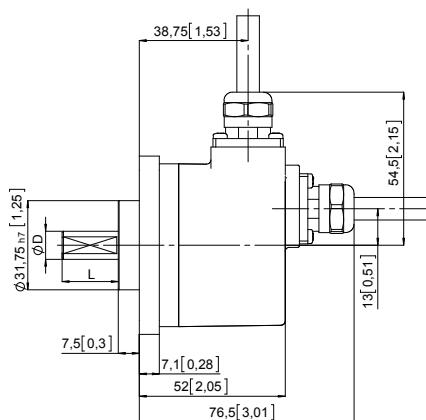


### Square flange, $\square$ 63.5 [2.5]

#### Flange type 5 and 7

(drawing with cable)

D	Fit	L
6 [0.24]	h7	10 [0.39]
10 [0.39]	f7	20 [0.79]
1/4"	h7	7/8"
3/8"	h7	7/8"



# Absolute encoders – multiturn

<b>Standard mechanical multiturn, optical</b>	<b>Sendix 5863 / 5883 (shaft / hollow shaft)</b>	<b>SSI / BiSS + incremental</b>
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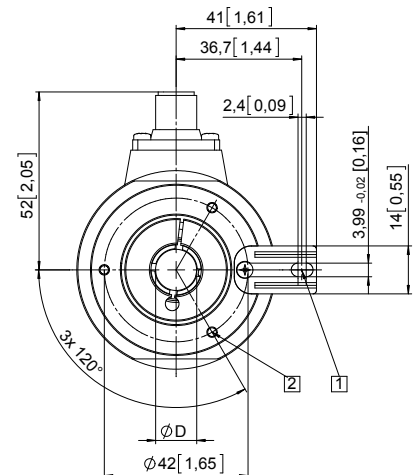
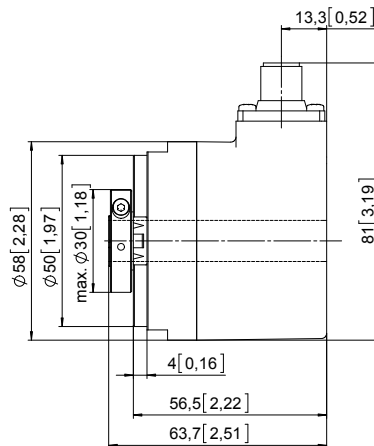
## Dimensions hollow shaft version

Dimensions in mm [inch]

### Flange with spring element, long Flange type 1 and 2

(drawing with M12 connector)

- 1 Slot spring element, recommendation: cylindrical pin DIN 7,  $\varnothing$  4 [0.16]
- 2 3 x M3, 6 [0.24] deep
- 3 Recommended torque for the clamping ring 0.6 Nm

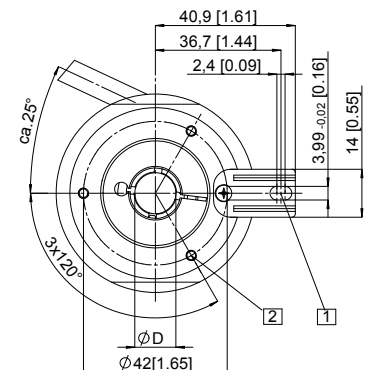
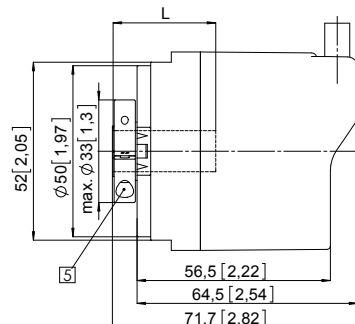


D	Fit
10 [0.39]	H7
12 [0.47]	H7
14 [0.55]	H7
15 [0.59] *)	H7
3/8"	H7
1/2"	H7

\*) Blind hollow shaft, insertion depth max. = 30 mm [1.18"]

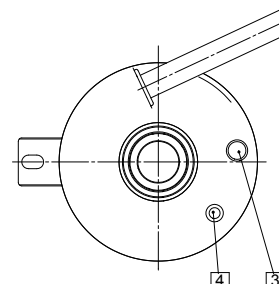
(drawing with tangential cable)

- 1 Slot spring element, recommendation: cylindrical pin DIN 7,  $\varnothing$  4 [0.16]
- 2 3 x M3, 5.5 [0.22] deep
- 3 Status-LED
- 4 SET button
- 5 Recommended torque for the clamping ring 0.6 Nm



D	Fit
10 [0.39]	H7
12 [0.47]	H7
14 [0.55]	H7
15 [0.59] *)	H7
3/8"	H7
1/2"	H7

\*) Blind hollow shaft, insertion depth max. = 30 mm [1.18"]



# Absolute encoders – multiturn

**Standard  
mechanical multiturn, optical**

**Sendix 5863 / 5883 (shaft / hollow shaft)**

**SSI / BiSS + incremental**

## Dimensions hollow shaft version

Dimensions in mm [inch]

### Flange with stator coupling, $\varnothing$ 63 [2.48]

#### Flange type 5 and 6

Pitch circle diameter for fixing screws

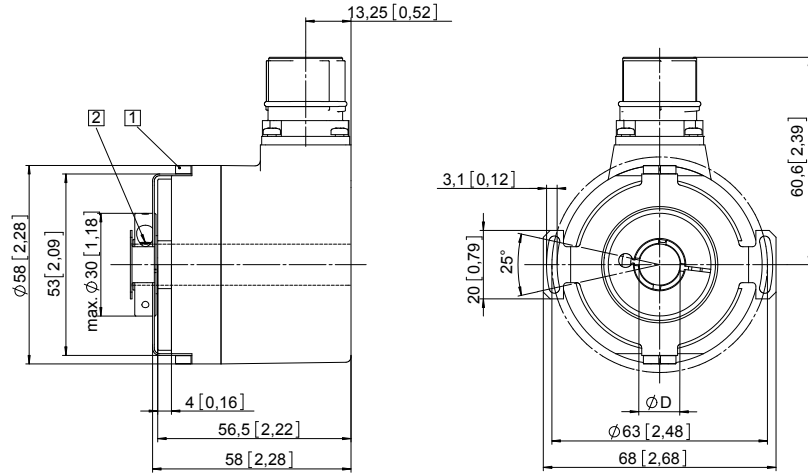
63 [2.48]

(drawing with M23 connector)

- 1 Fixing screws DIN 912 M2,5 x 6  
(washer included in delivery)
- 2 Recommended torque for the  
clamping ring 0.6 Nm

D	Fit
10 [0.39]	H7
12 [0.47]	H7
14 [0.55]	H7
15 [0.59] *)	H7
3/8"	H7
1/2"	H7

\*) Blind hollow shaft,  
insertion depth max. = 30 mm [1.18"]



### Flange with stator coupling, $\varnothing$ 65 [2.56]

#### Flange type 3 and 4

Pitch circle diameter for fixing screws

65 [2.56]

(drawing with cable)

- 1 Recommended torque for the  
clamping ring 0.6 Nm

D	Fit
10 [0.39]	H7
12 [0.47]	H7
14 [0.55]	H7
15 [0.59] *)	H7
3/8"	H7
1/2"	H7

\*) Blind hollow shaft,  
insertion depth (L) max. = 30 mm [1.18"]

